

Product Information

Recombinant Human PRL Protein, low endotoxin

CAT#: EPLE-23H

Prolactin (PRL) is a secreted neuroendocrine pituitary hormone that acts primarily on the mammary gland to promote lactation, but has pleiotropic effects in both males and females. Non-glycosylated prolactin is produced by the pituitary and packaged in storage granules before secretion, while glycosylated prolactin is reported to be constitutively secreted, have lower biological potency, and be removed from the circulation more quickly. Prolactin is synthesized mainly by the anterior pituitary in all mammals, where secretion is under tonic inhibition by hypothalamic dopamine. In humans, prolactin is also produced peripherally. Prolactin expression is low during early human pregnancy, but increases in late pregnancy. The prolactin receptor (PRLR) is a transmembrane type I glycoprotein that belongs to the cytokine hematopoietic receptor family. prolactin molecule is thought to bind two receptor molecules. In addition to its lactogenic activity, peripherally produced prolactin plays roles in breast and prostate cancer development, regulation of reproductive function, and immunoregulation.

Product Information

Short Name	Recombinant Human PRL Protein, low endotoxin
Recombinant	E. coli
Abbr	PRL(Human)
Alias	PRL; prolactin; decidual prolactin;
Type	P
similar	PRL
Product Overview	Recombinant Human Prolactin is produced by our E.coli expression system and the target gene encoding Leu29-Cys227 is expressed.
Source	E.coli
Species	Human
Molecular Mass	Mol Mass: 23 kDa AP Mol Mass: 25 kDa, reducing conditions.
Protein length	Leu29-Cys227
Endotoxin	Less than 0.001 ng/μg (0.01 EU/μg) as determined by LAL test.
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Storage	Lyophilized protein should be stored at < -20 centigrade, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7 centigrade for 2-7 days.

Aliquots of reconstituted samples are stable at < -20 centigrade for 3 months.

Storage Buffer	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, 1mM EDTA, pH7.4.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/mL. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Gene Name	PRL prolactin [Homo sapiens]
Official Symbol	PRL
Synonyms	PRL; prolactin; decidual prolactin;
GeneID	5617
mRNA Refseq	NM_000948
Protein Refseq	NP_000939
MIM	176760
UniProt ID	P01236
References	1. The Natural Compound Notopterol Binds and Targets JAK2/3 to Ameliorate Inflammation and Arthritis[J]. Qiong Wang. et al. Cell Reports. 2020.

Figure 1

